

State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF AIR QUALITY

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DAQE-889-97

September 19, 1997

Tony L. Christofferson
Geneva Rock Products
1565 West 400 North
PO Box 538
Orem, Utah 84057

Dear Mr. Christofferson:

Re: Approval Order for Modification to an Approval Order to Increase Production, Davis County,
CDS-B, Non-Attainment, NSPS, Title V

The attached document is an Approval Order for the above referenced project.

Future correspondence on this Approval Order should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any technical questions you may have on this project to Mr. Maung Maung. He may be reached at (801) 536-4153.

Sincerely,

Ursula K. Trueman, Executive Secretary
Utah Air Quality Board

UKT:MM:cmn

cc: Davis County Health Department

Image Not
Available

STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

APPROVAL ORDER FOR MODIFICATION TO AN APPROVAL ORDER TO INCREASE PRODUCTION

Prepared By: Maung Maung, Engineer

APPROVAL NUMBER

DAQE-889-97

Date: September 19, 1997

Source

Geneva Rock Products

**Ursula K. Trueman
Executive Secretary
Utah Air Quality Board**

Abstract

Geneva Rock Products (South Weber Pit) has submitted a notice of intent, dated December 30, 1996, to request an increase in their production level to 800,000 tpy. Geneva Rock Products sand and gravel operation at the South Weber Pit, located in Davis County, Utah, is currently operating as a permanent source in accordance with the Approval Order (AO) issued November 3, 1986, with a production limit of 720,000 tons per year. Davis County is an attainment area for all criteria pollutants except O₃. The calculated emissions from this source are PM₁₀ - 7.5 tpy, SO₂ - 1.8 tpy, NO_x - 19.8 tpy, CO - 7.5 tpy, and VOC - 1.7 tpy. Fugitive emission resulting from the crushing of material are controlled by the application of water via fog sprays at the crushers to maintain a moisture content of no less than 4% in material. This control procedure is considered Best Available Control Technology (BACT) for the plant. Modeling will not be required for this source because emission rates for all the pollutants are less than the lower limits for modeling as defined in "Criteria for Dispersion Modeling" of the Utah Division of Air Quality. A 30-day public comment period was required before granting an Approval Order.

The above-referenced project has been evaluated and found to be consistent with the requirements of the Utah Administrative Code Rule 307 (UAC R307), and the Utah Air Conservation Act. A 30-day public comment period was held and all comments received were evaluated. The conditions of this Approval Order reflect any changes to the proposed conditions which resulted from the evaluation of the comments received. This air quality Approval Order (AO) authorizes the project with the following conditions and failure to comply with any of the conditions may constitute a violation of this order:

General Conditions:

1. This AO applies to the following company:

Corporate Office
Geneva Rock Products
1565 West 400 North
P.O. Box 538
Orem, Utah 84059
Phone: (801) 741-7800
FAX: (801) 741-7830

The equipment listed below in this AO shall be operated at the following location:

PLANT LOCATION: Mouth of Weber Canyon on Highway 89, Utah

Universal Transverse Mercator (UTM) Coordinate System:
4,553.8 kilometers Northing; 423.7 kilometers Easting; Zone 12

2. Definitions of terms, abbreviations, and references used in this AO conform to those used in the Utah Administrative Code Rule 307 (UAC R307), and Series 40 of the Code of Federal Regulations (40 CFR). These definitions take precedence unless specifically defined otherwise herein.
3. Geneva Rock Products shall operate the sand and gravel operation at the South Weber plant according to the terms and conditions of this AO as requested in the Notice of Intent dated December 26, 1996.

4. A copy of this AO shall be posted on site. The AO shall be available to the employees who operate the air emission producing equipment. These employees shall receive proper instruction as to their responsibilities in operating the equipment according to all of the relevant conditions listed below.
5. The approved installations shall consist of the following equipment or equivalent*:

Crushing Plant:

- A. 45" Fine Head Cone Crusher
- B. Combination Unit: 54" Cone crusher/ 6' x 16' 3-Deck Screen
- C. Diesel generator
- D. Diesel Storage Tanks (2 x 500 gal.ea)

Wash Plant:

- A 5' x 16'-3Deck Screen
- B. Grizzly
- C. Diesel generator
- D. Diesel Storage Tank (10,000 galllons)

Miscellaneous:

- A. Associated conveyors Belt, Feeders, Stackers
- B. Front-end loaders
- C. Bulldozer
- D. Haul Trucks
- E. Water Truck

* Equivalency shall be determined by the executive secretary

Limitations and Tests Procedures

6. Visible emissions from the following emission points shall not exceed the following values:
 - A. Crusher - 10% opacity
 - B. All conveyor transfer points - 10% opacity
 - C. All diesel engines - 20% opacity
 - D. Conveyor drop points - 20% opacity
 - E. All other points - 20% opacity
 - F. Crusher screen- 10% opacity

Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. Visible emissions from mobile sources and intermittent sources shall use procedures similar to Method 9, but the requirement for observations to be made at 15-second intervals over a six-minute period shall not apply. Any time interval with no visible emissions shall not be included.

7. The following production limits shall not be exceeded without prior approval in accordance with R307-1-3.1, UAC:
 - A. 800,000 tons aggregate per rolling 12-month period
 - B. 3500 hours per rolling 12-month period

Compliance with the annual limitations shall be determined on a rolling 12-month total. The owner/operator shall calculate a new 12-month total based on the first day of each month using data from the previous 12 months. Records of consumption/production shall be kept for all periods when the plant is in operation. Records of consumption/production, including rolling 12-month totals shall be made available to the executive secretary or his representative upon request and shall include a period of two years ending with the date of the request. Production/Consumption shall be determined by examination of records. The records shall be kept on a daily basis. Hours of operation shall be determined by supervisor monitoring and maintaining of an operation log.

8. All unpaved roads and other unpaved operational areas that are used by mobile equipment shall be water sprayed and/or chemically treated to control fugitive dust. The application of water or chemical treatment shall be used. Treatment shall be of sufficient frequency and quantity to maintain the surface material in a damp/moist condition. The opacity shall not exceed 20% during all times the areas are in use or unless it is below freezing. If chemical treatment is to be used, the plan must be approved by the executive secretary. Records of water and/or chemical treatment shall be kept for all periods when the plant is in operation. The records shall include the following items:
 - A. Date
 - B. Number of treatments made, dilution ratio, and quantity
 - C. Rainfall received, if any, and approximate amount
 - D. Time of day treatments were made

Records of treatment shall be made available to the executive secretary upon request and shall include a period of two years ending with the date of the request.

9. The haul road limitations shall be:
 - A. .04 miles in length
 - B. 15 mph speed limit

These limitations shall not be exceeded without prior approval in accordance with R307-1-3.1, UAC. The haul road speed shall be posted.

10. Control of disturbed or stripped areas is required at all times (24 hours per day every day) for the duration of the project/operation until the area is reclaimed. Records of treatment or and/or reclamation shall be kept for all periods when the plant is in operation.

11. Visible fugitive dust emissions from haul-road traffic and mobile equipment in operational areas shall not exceed 20% opacity. Visible emissions determinations for traffic sources shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply. Six points, distributed along the length of the haul road or in the operational area, shall be chosen by the executive secretary or her representative. An opacity reading shall be made at each point when a vehicle passes the selected points. Opacity readings shall be made $\frac{1}{2}$ vehicle length or greater behind the vehicle and at approximately $\frac{1}{2}$ the height of the vehicle or greater. The accumulated six readings shall be averaged for the compliance value.
12. The Geneva Rock Products sand and gravel operation haul road shall be paved and shall be periodically swept or sprayed clean as dry conditions warrant or as determined necessary by the executive secretary. Records of cleaning paved roads shall be made available to the executive secretary or her representative upon request. Records shall include a period of two years before the date of request.
13. The moisture content of the material shall be maintained at a minimum of 4.0% by weight. The moisture content shall be tested if directed by the executive secretary using the appropriate American Society of Testing and Methods (ASTM) method.
14. The storage piles shall be watered to minimize generation of fugitive dusts as dry conditions warrant or as determined necessary by the executive secretary. Records of water and/or chemical treatment shall be kept for all periods when the plant is in operation.

Fuels

15. The owner/operator shall use only #2 fuel oil or better as fuel for mobile equipment and standby generator at the site. If any other fuel is to be used, an AO shall be required in accordance with R307-1-3.1, UAC.
16. The sulfur content of any fuel oil or diesel burned shall not exceed 0.5 percent by weight. Sulfur content shall be decided by ASTM Method D-4294-89, or approved equivalent. The sulfur content shall be tested if directed by the executive secretary.

Records & Miscellaneous

17. All installations and facilities authorized by this AO shall be adequately and properly maintained. Maintenance records shall be maintained while the plant is in operation. All pollution control vendor recommended equipment shall be installed, maintained, and operated. Instructions from the vendor or established maintenance practices that maximize pollution control shall be used. All necessary equipment control and operating devices, such as pressure gauges, amp meters, volt meters, flow rate indicators, temperature gauges, CEMS, etc., shall be installed and operated properly and easily accessible to compliance inspectors. A copy of all manufacturers' operating instructions for pollution control equipment and pollution emitting equipment shall be kept on site. These instructions shall be available to all employees who operate the equipment and shall be made available to compliance inspectors upon their request.

18. The owner/operator shall comply with R307-1-3.5, UAC. This rule addresses emission inventory reporting requirements. Each owner or operator of a stationary source subject to this rule shall maintain for a period of two years from the due date of each emission statement a copy of the emission statement submitted to the Division of Air Quality and records indicating how the information submitted in the emission statement was determined, including any calculations, data, measurements, and estimates used. Upon the request of the executive secretary or her representative, the owner or operator of the stationary source shall make these records available at the stationary source for inspection by any representative of the Division of Air Quality.
19. The owner/operator shall comply with R307-1-4.7, UAC. This rule addresses unavoidable breakdown reporting requirements. Any breakdown lasting longer than two hours shall be reported to the executive secretary within three hours of the breakdown if reasonable, but in no case longer than 18 hours after the beginning of the breakdown. During times other than normal office hours, breakdowns for any period longer than two hours shall be initially reported to the Environmental Health Emergency Response Coordinator. Within seven calendar days of the beginning of any breakdown lasting longer than two hours, a written report shall be submitted to the executive secretary. The owner/operator shall calculate/estimate the excess emissions (amount above AO limits) whenever a breakdown occurs. The total of excess emissions per calendar year shall be reported to the executive secretary with the inventory submittal, as directed by the executive secretary.

All records referenced in this AO which are required to be kept by the owner/operator, shall be made available to the executive secretary or her representative upon request and shall include a period of two years ending with the date of the request. All records shall be kept for a period of two years. A summary of those records that are required as part of this AO is included herein. This summary shall not be considered an additional requirement, but is included for informational purposes only. The condition that requires these records be kept as part of compliance with this AO is listed following the individual record. Examples of records to be kept at this source shall include the following as applicable:

- | | | |
|----|---------------------------|-----------------------|
| A. | Production rate | (Condition number 7A) |
| B. | Hours of operation | (Condition number 7B) |
| C. | Fugitive emission control | (Condition number 15) |
| D. | Maintenance records | (Condition number 17) |
| E. | Emission Inventory | (Condition number 18) |
| F. | Upset, breakdown episodes | (Condition number 19) |

Any future modifications to the equipment approved by this order must also be approved in accordance with R307-1-3.1.1, UAC.

<u>Pollutants</u>	<u>Tpy</u>
PM ₁₀	7.50
SO ₂	1.80
NO _x	19.80
CO	7.50
VOC	1.80
Aldehydes	0.37

These calculations are for the purposes of determining the applicability of Prevention of Significant Deterioration, nonattainment area, and Title V source requirements of the UAC R307. They are not to be used for purposes of determining compliance.

The executive secretary shall be notified in writing if the company is sold or changes its name. The notification shall be submitted within 30 days of such action.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including the Utah Air Conservation Rules.

Approved By:

Ursula K. Trueman, Executive Secretary
Utah Air Quality Board